

## CLAIMS

We Claim:

1. A computer readable medium having stored therein an object-oriented application program interface including a plurality of object-oriented object classes to  
5 allow input and output data to be communicated between applications, the computer readable medium comprising:

a first object-oriented object class for accepting input data on a Java MIDlet in a MIDlet Suite from an application management system on a mobile information device when the MIDlet is invoked on the mobile information device, wherein the input data is  
10 generated by another MIDlet in another MIDlet Suite; and

a second object-oriented object class for setting output data from a MIDlet in a MIDlet Suite when the MIDlet is terminated on a mobile information device, wherein the output data is available to an application management system on the mobile information device and can be used by other applications.

15

2. The computer readable medium of Claim 1 wherein the first object-oriented object class is a Java Muglet object class.

3. The computer readable medium of Claim 2 wherein the Java Muglet  
20 object class includes at least one of a getMediaType( ), getContentType( ), getMuglet( ), getReferringURI( ) and getURI( ) object-oriented methods.

4. The computer readable medium of Claim 1 wherein the second object-oriented object class is a Java System object class.
5. The computer readable medium of Claim 4 wherein the Java System object class includes a setExitURI( ) object-oriented method.
6. The computer readable medium of Claim 1 wherein the input data accepted by the first object-oriented object class and the output data set by the second object-oriented class includes a Uniform Resource Indicator (URI) scheme or an Internet media type.
7. The computer readable medium of Claim 1 wherein the output data set by the second object-oriented object class allows execution control to be returned to a previous context being used before the MIDlet was invoked.
8. The computer readable medium of Claim 1 wherein the input data is generated by a non-MIDlet application on the mobile information device.
9. The computer readable medium of Claim 1 wherein the output data can be used by non-MIDlet applications on the mobile information device.

10. The computer readable medium of Claim 1 wherein the output data can be used by other MIDlets in other MIDlet suites on the mobile information device.

5 11. The computer readable medium of Claim 1 wherein the first object-oriented class and the second object-oriented class are Java 2 Micro Edition classes.

12. The computer readable medium of Claim 1 wherein the mobile information device includes a mobile phone, personal digital assistant, or two-way pager.

10

13. A method for exchanging output data between applications on a mobile information device, comprising:

executing a Java 2 Micro Edition (J2ME) MIDlet on a mobile information device,

wherein the MIDlet has an object-oriented method in an object-oriented object

15 class available for setting output data from a MIDlet in a MIDlet suite; and

setting output data from the MIDlet before the MIDlet is terminated on the mobile information device using the object-oriented method in the object-oriented class,

wherein the output data is available to an application management system on the mobile information device and can be used by other MIDlets in other MIDlet Suites or

20 non-MIDlet applications on the mobile information device.

14. The method of Claim 13 further comprising a computer readable medium having stored therein instructions for causing a processor to execute the steps of the method.

5

15. The method of Claim 13 wherein the object-oriented method includes a `setExitURI()` object-oriented method from a System object-oriented class available to MIDlets.

10 16. The method of Claim 13 wherein the mobile information device is a mobile phone, a personal digital assistant or a two-way pager.

17. The method of Claim 13 wherein the step of setting output data includes setting output data including a Uniform Resource Indicator (URI) scheme or an Internet  
15 media type.

18. The method Claim 13 wherein the output data allows execution control to be returned to a previous context being used before the MIDlet was invoked.

20 19. A method for exchanging input data between applications on a mobile information device, comprising:

invoking a MIDlet from an application management system on a mobile  
information device;

wherein the MIDlet has a plurality of object-oriented methods in an object-  
oriented object class available for using input data created by other MIDlets; and

5        accepting input data created by another MIDlet from the application management  
system on the MIDlet using one or more of the plurality of object-oriented methods from  
the object oriented class.

20.     The method of claim 19 further comprising accepting input data created  
10    by a non-MIDlet application from the application management system on the MIDlet  
using one or more of the plurality of object-oriented method from the object oriented  
class.

21.     The method of Claim 19 further comprising a computer readable medium  
15    having stored therein instructions for causing a processor to execute the steps of the  
method.

22.     The method of Claim 19 wherein the object-oriented object class includes  
a Muglet object-oriented class available to MIDlets with at least one of a getMediaType(  
20    ), getContentType( ), getMuglet( ), getReferringURI( ) and getURI( ) object-oriented  
methods.

23. The method of Claim 19 wherein the step of accepting input data includes accepting input data including a Uniform Resource Indicator (URI) scheme or an Internet media type.

5

24. The method of claim 19, wherein the MIDlet is a J2ME MIDlet.

25. A method for invoking an application as an application handler on a mobile information device, comprising:

10       invoking a Java 2 Micro Edition (J2ME) MIDlet from an application management system on the mobile information device as a MIDlet handler;

          wherein the MIDlet handler includes a plurality of object-oriented methods in an object-oriented object class available for using input data created by other MIDlets;

          determining that the MIDlet handler was invoked as Muglet;

15       calling an object-oriented method in the object-oriented object class from the MIDlet handler to determine what type of input data will be processed by the MIDlet handler, wherein the object-oriented method returns a return value; and

          processing the input data based on the return value by calling one or more other object-oriented methods in the object-oriented object class.

20

26. The method of claim 25, further comprising invoking another MIDlet from the MIDlet handler using the processed input data.

27. The method of Claim 25 further comprising a computer readable medium having stored therein instructions for causing a processor to execute the steps of the method.

28. The method of Claim 25 wherein the input data includes a Uniform Resource Indicator (URI) scheme or an Internet media type.

10

29. The method of Claim 25 wherein the calling step includes calling getMediaType( ) object-oriented method from a Muglet object-oriented object class available to MIDlets.

15 30. The method of Claim 25 wherein the processing step includes calling getMuglet( ), getURI( ) or getReferringURI( ) object-oriented methods from a Muglet object-oriented object class available to MIDlets.

31. The method of Claim 25 wherein the MIDlet handler is a URI scheme or Internet media type handler.

20

32. A computer readable medium having stored therein an object-oriented application program interface including a plurality of object-oriented object classes to allow input and output data to be communicated between applications on a mobile information device, the computer readable medium comprising:

a Muglet object-oriented object class for accepting input data on a Java 2 Micro Edition (J2ME) MIDlet in a MIDlet Suite from an application management system on a mobile information device when the MIDlet is invoked on the mobile information device, wherein the input data is generated by another MIDlet in another MIDlet Suite; and

a System object-oriented object class for setting output data from a MIDlet in a MIDlet Suite when the MIDlet is terminated on a mobile information device, wherein the output data is available to an application management system on the mobile information device and can be used by other MIDlets in other MIDlet Suites or by other non-MIDlet applications.

15

33. The computer readable medium of Claim 32 wherein the input data accepted by the first object-oriented object class and the output data set by the second object-oriented object class includes a Uniform Resource Indicator (URI) scheme or an Internet media type.

20